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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/676,935	10/01/2003	Taketoshi Aratani	0671.68504	7843
24978	7590	07/20/2005	EXAMINER	
GREER, BURNS & CRAIN 300 S WACKER DR 25TH FLOOR CHICAGO, IL 60606			BUI, BRYAN	
			ART UNIT	PAPER NUMBER
			2863	

DATE MAILED: 07/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

3M

<b>Office Action Summary</b>	Application No. 10/676,935	Applicant(s) ARATANI ET AL.	
	Examiner Bryan Bui	Art Unit 2863	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 6 is/are rejected.
- 7) ☒ Claim(s) 2-5 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |  |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 1 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Makuuchi et al (US 6,700,369).

With respect to claims 1 and 6, Makuuchi et al teach a system and method of testing magnetic recording medium or a magnetic head testing apparatus (figure 1), comprising: reference information storing means (figure 1, item 151) for holding a predetermined reference sampling period and a reference number of samplings; sampling means (figure 1, item 141 and figure 4, sampling data) for sampling reproduced data read out a plurality of times from a magnetic medium in said

predetermined reference sampling period (figure 1, item 133, and figure 4); sampling number acquiring means (column 5, lines 54-55) for obtaining a sampling number of measured data from said reproduced data based on a result of sampling; sampling number ratio calculating means (column 6, lines 11-26) for calculating a ratio of said sampling number of said measured data and a reference sampling number. Makuuchi et al does not disclose sampling data re-acquiring means for changing said sampling period of said measured data and re-acquiring sampling data depending on said calculated ratio; and measured data overlap-displaying means for overlap-displaying said sampling data re-acquired from a plurality of measured data. Makuuchi et al, however, discloses means of the sector detection function for sampling the disc reproduction signals distributed by the disc reproduction signals distributor circuit 133 (figure 1) for sampling clocks are produced and outputted therefrom and the mode change/timing controller portion 137 (figure 1) and outputting (displaying, and figure 1, item 160) the sampling data with phase difference (overlap-displaying) of N phases (column 18, line 62 to column 19, line 14 and figure 6). Therefore, it would have been obvious to one of ordinary skill in the art to modify Makuuchi et al teachings to include sampling clocks and the mode change/timing controller portion as taught by Makuuchi et al as an equivalent function provides sampling data re-acquiring means for changing said sampling period of said measured data and re-acquiring sampling data depending on said calculated ratio; and measured data overlap-displaying means for overlap-displaying said sampling data re-acquired from a plurality of measured data as claimed in order to display the measurement values of the disc reproduction signal obtained in

the data processing portion (figure 1, item 135 and figure 6).

***Allowable Subject Matter***

4. Claims 2-5 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

In combination with other limitations of the corresponding claims, the prior art fails to teach: wherein said sampling number acquiring means further comprises: average value acquiring means for obtaining each average value of a difference between peak phases of preamble and postamble from said reproduced data having preamble, measured data, and postamble; phase acquiring means for acquiring a peak phase, preamble obtained from said average value, and preamble in which a square sum of a phase difference of postamble from each said peak phase and said postamble phase; re-sampling period acquiring means for acquiring a re-sampling period from a phase difference between said acquired preamble and postamble and a predetermined number of bits therebetween; measured data phase difference acquiring means for determining a data start phase and a data end phase of said measured data from said sampling period acquired and then acquiring a phase difference thereof; and sampling number calculating means for calculating a sampling number of said measured data from said acquired phase difference.

**Conclusion**

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bryan Bui whose telephone number is 571-272-2271. The examiner can normally be reached on M-Th from 7am-4pm, and Alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John E. Barlow can be reached on 571-272-2269. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

BB

7/18/2005

**BRYAN BUI**  
**PRIMARY EXAMINER**

